€TRAINING

Configuring BGP on Cisco Routers BGP

7 - 11 October 2024
London (UK)
Landmark Office Space

Configuring BGP on Cisco Routers BGP

REF: B2279 DATE: 7 - 11 October 2024 Venue: London (UK) - Landmark Office Space Fee: 5850 Euro

Introduction:

This program is designed to prepare participants for the certification exam only.

This training program provides participants with in-depth knowledge and practical skills essential for configuring and managing Border Gateway Protocol BGP on Cisco routers. It empowers them to effectively handle inter-domain routing, optimize network performance, and ensure robust network connectivity.

Program Objectives:

By the end of this program, participants will be able to:

- Understand BGP fundamentals and its role in inter-domain routing.
- Configure and troubleshoot BGP on Cisco routers.
- Optimize BGP performance and manage BGP policies.
- Implement advanced BGP features for enhanced network stability.
- Prepare for BGP-related certification exams.

Targeted Audience:

- Network Engineers.
- Network Administrators.
- IT Professionals managing Cisco networks.
- Network Architects.
- Systems Engineers.

Program Outline:

Unit 1:

Introduction to BGP:

- Overview of BGP and its significance in inter-domain routing.
- Differences between BGP and other routing protocols.

- Understanding BGP attributes and path selection.
- Establishing BGP sessions and peer relationships.
- Case studies on real-world BGP implementations.

Unit 2:

Basic BGP Configuration:

- Steps to configure BGP on Cisco routers.
- Defining BGP neighbors and configuring peer sessions.
- Advertising and receiving BGP routes.
- Understanding and configuring BGP timers.
- Hands-on exercises on basic BGP configuration.

Unit 3:

BGP Policy and Path Control:

- Implementing BGP policies using route maps and prefix lists.
- Configuring BGP attributes for path manipulation.
- Using local preference, MED, and AS-path prepending.
- Techniques for BGP route filtering and aggregation.
- Practical scenarios on BGP policy configuration.

Unit 4:

Advanced BGP Features:

- Understanding and configuring BGP route reflectors and confederations.
- Implementing BGP multipath and load balancing.
- Configuring BGP for IPv6 and VPNv4.
- Troubleshooting common BGP issues and optimizing performance.
- Real-world examples of advanced BGP configurations.

Unit 5:

BGP Troubleshooting and Optimization:

- Techniques for monitoring and troubleshooting BGP sessions.
- Analyzing BGP routing tables and diagnosing routing issues.
- Tools and commands for BGP troubleshooting.
- Best practices for optimizing BGP performance and stability.
- Case studies on troubleshooting complex BGP networks.

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